

Please **CANCEL** CLAIMS 6 and 10.

Please **AMEND** the CLAIMS as follows:

1. (Currently Amended) A method of provisioning a cable modem in a cable modem network having a provisioning system and a headend, the method comprising:
 - transmitting a configuration file to a cable modem;
 - receiving, at a headend, a first data packet from a first cable modem, the first data packet having a first service flow, the first data packet being mapped to a first sub-interface;
 - receiving, at a headend, a second data packet from the first cable modem, the second data packet having a second service flow, the second data packet being mapped to a second sub-interface;
 - deriving the first service flow and the second service flow at the headend; and
 - tagging the first data packet with a first MPLS tag and tagging the second data packet with a second MPLS tag, ~~wherein the headend is unmodified.~~
2. (Original) A method as recited in claim 1 further comprising examining a configuration file at the headend using a SID to determine a service flow.
3. (Original) A method as recited in claim 2 wherein the configuration file contains a plurality of MPLS tags associated with a plurality of service flows.
4. (Original) A method as recited in claim 1 further comprising downloading vendor-specific information and MPLS data to a configuration file before transmitting the configuration file to the cable modem.
5. (Original) A method as recited in claim 1 further comprising modifying the configuration file at the provisioning system.
6. (Cancelled)

7. (Original) A method of enabling a cable modem to service multiple quality of service levels for a data packet transmitted from one or more connected IP-addressable devices, the method comprising:

- receiving a configuration file upon powering up the cable modem, the configuration file containing one or more MPLS tags, an MPLS tag being associated with a service flow;

- receiving a data packet from a connected IP-addressable device, the data packet having an IP address;

- examining the IP address of the data packet; and

- determining a classifier based on the IP address by examining the configuration file.

8. (Currently Amended) A system for provisioning a cable modem in a cable modem network having a provisioning system and a headend, the system comprising:

- means for transmitting a configuration file to a cable modem;

- means for receiving, at a headend, a first data packet from a first cable modem, the first data packet having a first service flow, the first data packet being mapped to a first sub-interface;

- means for receiving, at a headend, a second data packet from the first cable modem, the second data packet having a second service flow, the second data packet being mapped to a second sub-interface;

- means for deriving the first service flow and the second service flow at the headend; and

- means for tagging the first data packet with a first MPLS tag and tagging the second data packet with a second MPLS tag, ~~wherein the headend is unmodified.~~

9. (Original) A system for enabling a cable modem to service multiple quality of service levels for a data packet transmitted from one or more connected IP-addressable devices, the system comprising:

- means for receiving a configuration file upon powering up the cable modem, the configuration file containing one or more MPLS tags, an MPLS tag being associated with a service flow;

- means for receiving a data packet from a connected IP-addressable device, the data packet having an IP address;

“ means for examining the IP address of the data packet; and
means for determining a classifier based on the IP address by examining the configuration file.

10. (Cancelled)

11. A cable modem comprising stored program instructions for performing the method of claim 7.

Please **ADD** new **CLAIMS** as follows:

12. (New) The method as recited in claim 1, wherein the headend is unmodified.

13. (New) The method as recited in claim 1, wherein the first service flow is associated with the first MPLS tag and the second service flow is associated with the second MPLS tag.

14. (New) The method as recited in claim 7, wherein the classifier identifies a Quality of Service.

15. (New) The method as recited in claim 7, wherein each classifier has an associated IP address range.

16. (New) The method as recited in claim 7, wherein each service flow maps to a classifier that identifies a Quality of Service.

17. (New) The system as recited in claim 8, wherein the headend is unmodified.